

Towards Responsible AI Use in Scientific Research: Reflections and Co-construction at the LS2N

Richard Dufour (Odile Bellenguez, Colin de la Higuera, Hoël Le Capitaine)

richard.dufour@ls2n.fr

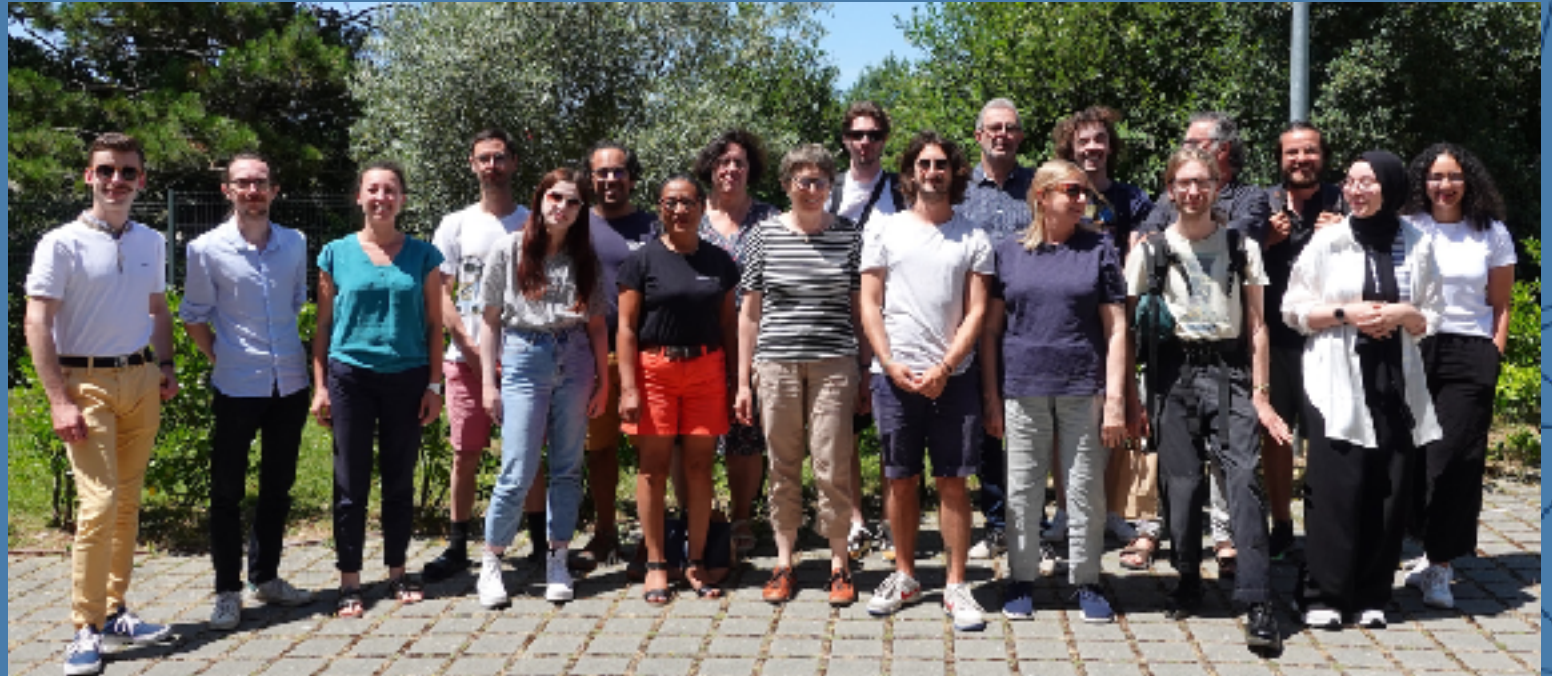
Laboratoire des Sciences du Numérique de Nantes (LS2N)
Equipe TALN/NLP (Traitement Automatique des Langues Naturelles)

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The TALN team @ LS2N



- Around 25 researchers, including 10 permanent
- Research themes
 - Language modeling
 - Generative IA
 - Information extraction
 - Evaluation and data
- Specialty domains
 - Health
 - Science
 - Education
 - Law
- Master ATAL
- Holder of the UNESCO Chair in Open Educational Resources and AI (RELIA) - Colin de la Higuera



Context and Motivations

- Why discuss AI now?
 - AI tools spread across the entire research workflow
 - Rapid evolution with (still) uncertain practices
 - Need shared principles for integrity, rigor, and transparency
 - Chance to shape responsible use together
- Work and reflections initiated at LS2N with Odile Bellenguez and Colin de la Higuera in September 2024 with a first formalization with a « charter »
 - A short document (3 pages)
 - Special session at the « Mise au vert » in October 2025 with Hoël le Capitaine and several researchers of the LS2N



What This Initiative Is (and Is Not)

- This is:
 - A reflection and co-construction process
 - A set of evolving recommendations
 - A step toward a shared culture in our scientific work
 - A dialogue across all roles in the lab
- This is not:
 - A compliance or policing mechanism
 - A fix or final « charter »
 - A constraint to limit research freedom



Where AI Appears in Scientific Work

- Even though it is still in its early stages, AI can assist across the (nearly full) research pipeline:
 - Brainstorming & idea exploration
 - Literature synthesis and search
 - Data cleaning, transformation, simulation
 - Modeling, coding, debugging
 - Writing, rewriting, translation
 - Creating tables, figures, slides
 - ...



Who Is Concerned in a lab?

- Everyone!
 - Researchers and teacher-researchers
 - PhD students and postdocs
 - Master's students and interns
 - Technical and administrative staff
- Today, we are focusing on researchers (junior or experienced)



The Five (first) Key Articles

- **Article 1:** AI Tools Definition
- **Article 2:** Responsibility of Results
- **Article 3:** Source Transparency
- **Article 4:** Practices & Data Responsibility
- **Article 5:** Sincerity of Competencies



Article 1: AI Tools Definition

- AI tools for research activities:
 - Data exploitation and analysis
 - Document and information synthesis
 - Support construction (text, graphics, translations)
 - Direct and indirect usage



Article 2: Human Responsibility

- Authors remain fully responsible
- AI tools are NOT autonomous entities
- Guarantee accuracy and transparency
- No delegation of ethical accountability



Article 3: Source Transparency

- Communicate sources and methods used
- Proper citation and referencing
- Verify all third-party sources
- Never fabricate or falsify information



Article 4: Data & Practices Responsibility

- **Vigilance:** Watch for errors, biases, and representativeness
- **Data ethics:** Use only non-sensitive data, respect regulations
- **Impact:** Consider environmental and social consequences



Article 5: Sincerity of Competencies

- AI assistance cannot replace genuine learning:
 - Maintain real mastery of knowledge
 - Develop authentic competencies
 - Efficiency must not compromise learning



Our Mission as Researchers

- To produce and disseminate knowledge with the highest vigilance for the benefit of research communities, students, and society as a whole
- Why this reflection?
 - Continuous emergence of new AI artifacts
 - Regular gaps in knowledge and practices
 - Difficulty determining appropriate conduct
 - Need for a shared framework and dialogue



Moving Forward Together

- This is just the beginning:
 - An evolving reflection, not fixed rules
 - Building a culture of conscious AI use
 - Individual and collective responsibility
- The peer-review process is beginning to see the effects of AI tools: the example of ICLR 2026...



A still « in-progress » reflection

- How can we ensure transparency in our work?
 - What support do we need from the lab?
 - How do we balance efficiency with learning?
 - ...
-
- Next step: a group of discussion / experience sharing is in construction!



Thank you for your attention!
Questions? Comments? Reflections?